

REMARKS

Claims 1, 2 and 4-10 stand rejected under 35 U.S.C. § 102(e) on the basis of Lee et al. (U.S. Patent No. 6,223,420). Independent claims 1 and 8 have been amended to more clearly distinguish the present invention from this reference. Applicants traverse this rejection because the cited reference does not disclose (or suggest) a magnetic head having an MR film and a flux guide wherein a part of a surface of the MR film overlaps a part of a surface of the flux guide, and wherein the surfaces of the MR film and the flux guide are not at an edge of the MR film and the flux guide, respectively, as in amended claims 1 and 8. Further, Applicants traverse this rejection because the cited reference does not disclose (or suggest) a magnetic head having a flux guide formed from the MR film and further having a reduced thickness as compared to the MR film, as in amended claims 9 and 10.

In Fig. 10 of Lee et al., the front edge 226 of the flux guide 208 abuts the back edge 220 of the read sensor 202 (column 6, line 24-26). By contrast, in the magnetic head of the present invention, a part of a surface of the MR film 10 overlaps a part of a surface of the flux guide 8, and the surfaces of the MR film 10 and the flux guide 8 are not at an edge of the MR film and the flux guide, respectively.

In other words, the magnetic head of Lee et al. requires that the flux guide 208 and the magnetoresistance film 202 be formed in a coplanar arrangement. However, in the present invention, the flux guide 8 and an insulating film 4 must first be formed so that the magnetoresistance film can be stacked, on both the flux guide 8 and the insulating film 4 so

that a part of a surface of the MR film (that is not an edge) overlaps a part of a surface of the flux guide (that is not an edge). Lee et al. does not disclose (or suggest) forming the flux guide 208 such that a part of a surface of the MR film overlaps a part of a surface of the flux guide wherein the surfaces are not at an edge of the MR film and the flux guide, respectively. For this reason, Applicants submit that claims 1-8 are allowable.


Claims 9 and 10 have been amended to recite that the flux guide is formed from the MR film and has a reduced thickness compared to the MR film. Applicants submit that Lee et al. does not disclose or suggest a flux guide formed from the MR film and having a reduced thickness compared to the MR film.

The Examiner asserts that the flux guide 208 is formed as part of the magnetoresistance film 202 merely because they are in direct immediate contact therewith as a “contiguous junction.” However, Applicants submit that a contiguous junction does not mean that the flux guide 208 is formed from the MR film 202, but merely means that the edges of the various components interfacially engage one another without any insulation material between them. This definition of “contiguous junction” is supported in the Lee et al. reference at col. 6, lines 31-33. Thus, the features of claims 9 and 10 are not disclosed or suggested by Lee et al. Accordingly, allowance of claims 9 and 10 is requested.

For the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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